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AGRICULTURAL MEMORANDUM NO 381

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Gramineae Pollen in London

3. Effect of rain on previous day

Using the Kew rainfall data as an indicator, the following analyses were made:

Phase 1 (May 1st to "start" in early June)

Over 5 mm of rainfall in the day (0600-1800) period on 24 occasions in the 10 years 1961-1970. Daily mean pollen counts on the following days fell under the following categories

Zero count	19
10 or 20	5

The general pattern of release in this phase implies 66.7% zero counts, the expected figure would therefore be 16 in 24 occasions. This increase is not significant, a chi-squared test gives P = 0.20 (chi-square 1.69).

Phase 2 ("start" to June 30th)

14 occasions of over 5 mm rain the previous day were experienced and pollen counts compared with the general pattern gave:

	Low	Moderate	High	Extreme
Actual	4	5	4	1
Expected	4.1	6.0	2.9	1.0

It is obvious that no significant effect on distribution pattern is present.

Phase 3 (July)

17 occasions, analysed as above gave:

	Low	Moderate or above
Actual	15	2
Expected	11.7	5.3

The number of occasions of low counts is greater than expected, a chi-squared test gives P = 0.09, not low enough to be significant (chi-square is 2.99).

Any comments or suggestions on this paper should be referred to the author.

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